



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Northwest Regional Office, 3190 - 160th Ave S.E. • Bellevue, Washington 98008-5452 • (206) 649-7000

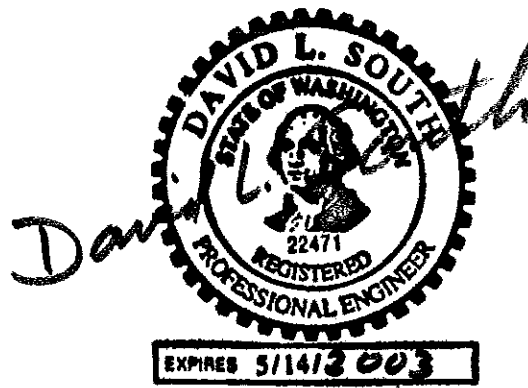
**Professional Engineer's Statement
Everett Smelter Cleanup, 2000-2001**

Sampling and soil remediation were carried out at the following homes within the Everett Smelter Site during the years 2000 and 2001:

<u>Address</u>	<u>Owner</u>
Muriel Jones	110 Bridgeway
Andrew Michels	235 Bridgeway
Jeanette Mempa	236 Bridgeway
Thomas, Christine & Ronnie	240 Bridgeway
Martha Watkins	244 Bridgeway
Joanne Felmer	2803 Medora Way
Terry Tavares & Linda Guy-Tavares	2811 Medora Way
Duane & Edna Rapelje	2817 Medora Way
Dave & Rene Goodrich	2818 Medora Way
Ron & Bonnie Sylvester	2830 Medora Way
Anh Black	528 Hawthorne
Steve & Sherrie Wamba	415 Legion Drive
Gary & Darlene Bunker & Sandra Kane	112 Skyline Drive
Michael Paeth	116 Skyline Drive
Randy Hall	212 Skyline Drive
Willy Pompey	215 Skyline Drive
Dorothy Larson	218 Skyline Drive
Bob & Peggy Redline	221 Skyline Drive
Michael & Sheila Crehan	222 Skyline Drive
Kurt Bertilson	230 Skyline Drive
Louise Hiller	302 Skyline Drive
Margie Hogle	303 Skyline Drive
Fred Brown	307 Skyline Drive
Jackie Robinett	308 Skyline Drive
Al Vandenbosch	316 Skyline Drive
Al Sorenson	320 Skyline Drive
Jo Newland	323 Skyline Drive
John & Christina Bull	328 Skyline Drive

Based on the results of testing and inspections, it is my opinion that the soil remediation carried out at these homes was performed in substantial compliance with the plans, specifications, and related documents governing the work.

Remediation work remaining to be done at these homes includes evaluation of crawl space data and addressing crawl spaces as necessary and carpet and duct cleaning. Some plant replacement also remains to be done and will be done this Spring.



Washington Department of Ecology Everett Smelter Site 2000 - 2001 Cleanup

Details of Cleanup Activities

The Department of Ecology (Ecology) targeted the yards of 28 homes within the Everett Smelter Site for cleanup in 2000 and 2001. Cleanup activities were conducted between August 2000 and March 2001, and again between July and November, 2001. The cleanup was conducted according to the *Everett Smelter Site: Integrated Final Cleanup Action Plan and Final Environmental Impact Statement for the Upland Area*.

This report describes the cleanup actions that were conducted, what arsenic-contaminated soil was not removed and where it remains for the following location:

Property Owner Willie Pompey

Address: 215 Skyline Drive
 Everett, WA 98201

Snohomish County
State of Washington
Tax Parcel No. # 005203-000-027-00

This property was divided by Ecology into three Decision Units, A, B and C, as shown on the attached map, for purposes of pre-cleanup sampling and decision-making regarding the depth to which excavation was required. The following is a summary of the work done in the remediation of the property within each of the decision units.

Decision Unit: A

Results of pre-cleanup sampling indicated 12 inches of soil were to be excavated from within most of this decision unit. Attachment B shows that below 12 inches, results of composite sample analyses are below the remediation levels of 60 parts per million (ppm). The soil below 12 inches does not contain arsenic levels above the cleanup level of 20 ppm. Sampling conducted in 1997 indicated that soils on the south side of the house, beginning at a point under the peak of the roof and extending south to the vicinity of sampling location A-7 then east to the border of Decision Unit B, needed to be excavated to a depth of 18 inches. Because the soil in the portion of the Decision Unit excavated to 18 inches contains arsenic levels above the cleanup level of 20 ppm, a geofabric marker was placed in this portion of the Decision Unit.

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
RESEARCH REPORT

CHICAGO, ILLINOIS

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Field measurements by the Ecology on-site coordinator confirmed that soil was removed to a depth of 12 inches or 18 inches as required. The paved driveway and the walkway to the front door were not removed. Along the sides of the existing home, paved driveway and the walkway, the excavation was sloped approximately 1:1 away from the foundations to protect the integrity of the structures. All plants and planting beds were removed. In order to facilitate excavation, the chain-link fence between the house and the southern property line was removed. A gravity wall, backfilled with washed gravel, was constructed along the southern property line to allow removal of contaminated soils and preserve the paved driveway and original grade of the adjoining property to the south. The wall was extended to the north, parallel to Skyline Drive to allow restoration of the original grade. Downspouts from the gutters were connected by PVC pipe to a drainage structure composed of washed rock and geofabric placed in Decision Unit B. After placing a geofabric marker in the area excavated to 18 inches, the Decision Unit was backfilled with clean material, as described in the *Specifications for Everett Residential Soil Remediation*. The excavation along the north side of the driveway and house was backfilled with crushed rock and compacted. Topsoil was placed in the remaining portion of the Decision Unit, the fence was restored to its original location and sod and shrubs were planted.

Decision Unit: B

Results of pre-cleanup sampling indicated 36 inches of soil were to be excavated from within this decision unit. Attachment B shows that at 36 inches, results of composite sample analyses are above the remediation level of 150 ppm. Because the soil below 36 inches may contain arsenic levels above the cleanup level of 20 ppm, a geofabric marker was placed. In order to facilitate excavation, the chain-link fence separating 215 and 221 Skyline Drive was removed. The fence was replaced once the yard had been restored..

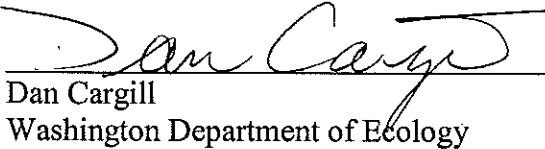
Field measurements by the Ecology on-site coordinator confirmed that soil was removed to a depth of 36 inches. Along the sides of the existing home, the excavation was sloped approximately 1:1 away from the foundation to protect the integrity of the structure. All plants and planting beds were removed. In order to facilitate excavation, the chain-link fence separating 215 and 221 Skyline Drive was removed. The fence was replaced once the yard had been restored. Downspouts from the roof drains were connected by plastic pipe to a drainage structure composed of washed rock and geofabric in the back yard. After placing a geofabric marker, the Decision Unit was backfilled with clean material, as described in the *Specifications for Everett Residential Soil Remediation*. After placing the topsoil, sod and shrubs were planted.

Decision Unit: C

Results of pre-cleanup sampling indicated 18 inches of soil were to be excavated from within this decision unit. Attachment B shows that below 18 inches, results of composite sample analyses are below the remediation levels of 60 and 150 ppm and discrete sample analyses are below the remediation levels of 150 and 500 ppm. However, because the

soil below 18 inches contains arsenic levels above the cleanup level of 20 ppm, a geofabric marker was placed.

Field measurements by the Ecology on-site coordinator confirmed that soil was removed to a depth of 18 inches. After placing a geofabric marker, the Decision Unit was backfilled with clean material, as described in the *Specifications for Everett Residential Soil Remediation*. After placing the topsoil, the steep slope was covered with jute netting and planted with junipers to prevent erosion. The rest of the Decision Unit was planted with sod.


Dan Cargill
Washington Department of Ecology

January 9, 2002

DRC:dc

Attachments: A. Site Map
B. Graphs of Arsenic Concentration vs. Depth
C. Explanation of graphs

Note: If the attachments listed above do not accompany this document, copies may be obtained from Ecology. Please contact Central Records at Ecology's Northwest Regional Office (NWRO), at (425) 649-7190 for information on obtaining copies.

cc: Ecology Central Files, NWRO
Office of the Attorney General
Snohomish Health District
City of Everett Public Works
Everett Public Library
Snohomish PUD
Northeast Everett Community Organization
Northwest Everett Neighborhood Association
Asarco Information Center, Everett

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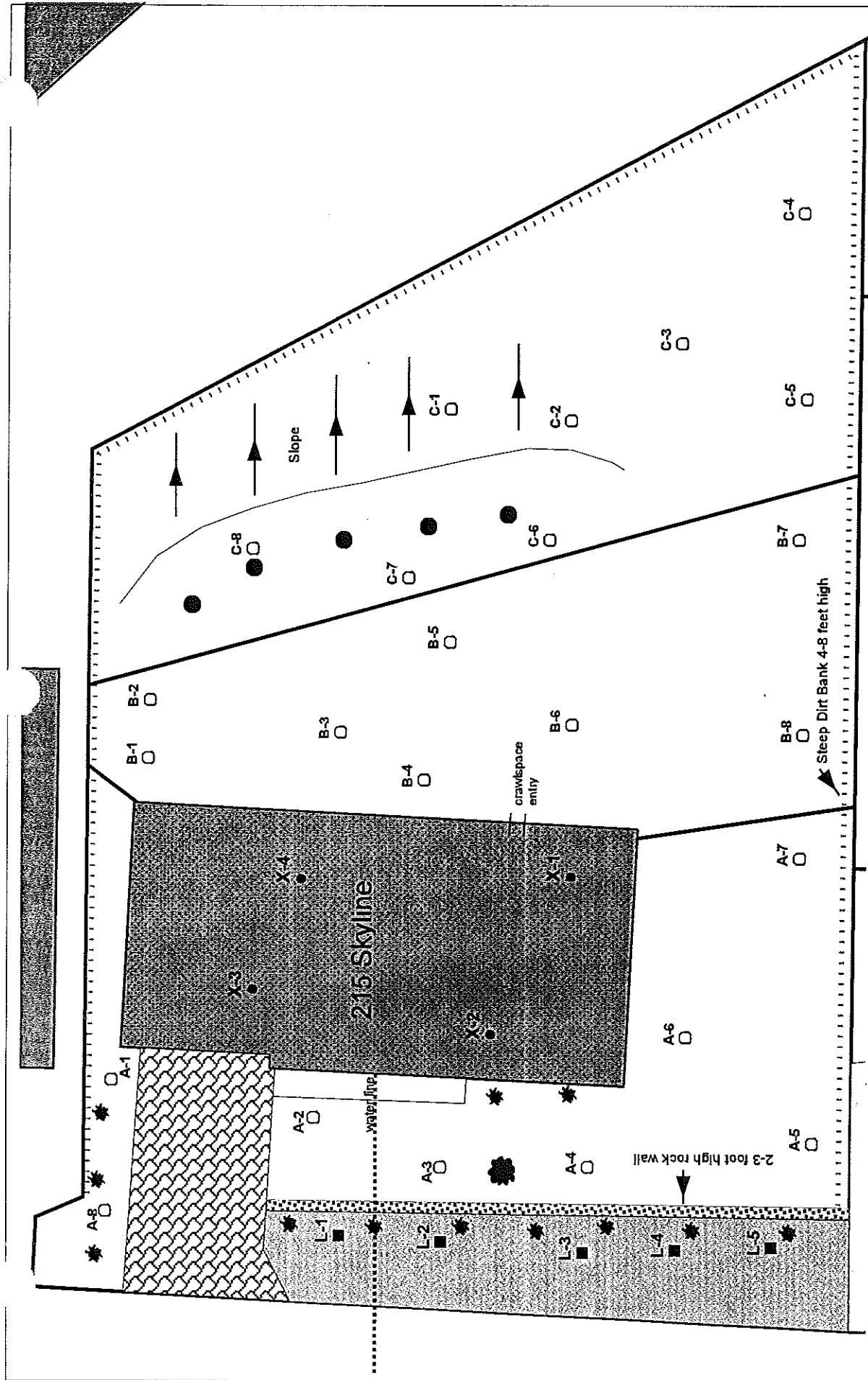
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215 Skyline

Everett Smelter Homesite Cleanup
 Source: Snohomish Health District

- Crawlspaces Samples
- Landscapes Samples
- DU Samples



Not to scale



